In the Claims

1. (Currently Amended) A method for machine-milking a dairy animal without substantially increasing milking time, the method comprising the steps of:

defining a standard pressure changing phase duration in which no changes to pressure changing speed rates are made;

generating a pulsed vacuum in a pulse chamber of a teat cup by altering the vacuum in the pulse chamber during pressure changing phases;

controlling a pressure curve for the duration of one pressure changing phase ~~with at least~~ having two pressure changing speed rates; and

limiting the total duration for the pressure changing phase, with ~~at least~~ two pressure changing speed rates, to not substantially exceed the defined standard pressure changing phase duration.

2. (Previously Presented) The method according to claim 1, wherein the step of controlling the pressure curve includes the step of:

adjusting the pulsed vacuum during the pressure changing phase.

3. (Previously Presented) The method according to claim 1, wherein the step of controlling the pressure curve includes the step of:

controlling the pulsed vacuum during the ventilation phase.

4. (Previously Presented) The method according to claim 1, wherein the step of controlling the pressure curve includes the step of:

controlling the pulsed vacuum during the evacuation phase.

5. (Previously Presented) The method according to claim 1, and further comprising the step of:

changing the pressure changing speed rates substantially continuously.

6. (Canceled)

7. (Previously Presented) The method according to claim 1, wherein the step of controlling the pressure curve comprises the steps of:

controlling a first stage and a subsequent stage of a ventilation phase such that the pressure changing speed rate in the first stage is substantially flatter than in the subsequent stage.

8. (Previously Presented) The method according to claim 1, wherein the step of controlling pressure curve includes the steps of:

controlling a first stage and a subsequent stage of the evacuation phase such that the pressure changing speed rate in the first stage is substantially steeper than in the subsequent stage.

9. (Currently Amended) The method according to claim 1, and further comprising the step of:

shifting from one pressure changing speed rate to another pressure changing speed rate occurs while the pressure in the pulse chamber when ~~the~~ a liner is in contact with an animal's teat.

10. (Previously Presented) The method according to claim 1, and further comprising the step of:

controlling the pressure curve for the duration of the pressure changing phase comprises the step of:

operating a pulsator valve used in generating the pulsed vacuum.

11. (Previously Presented) The method according to claim 10, and further comprising the step of:

varying a free flow vacuum resistance between the teat cup and the pulsator valve.

12. (Previously Presented) The method according to claim 10, and further comprising the step of:

changing a valve chamber cross-section of the pulsator valve to vary vacuum in the chamber.

13. (Currently Amended) The method according to claim 10, and further comprising the step of:

~~changing~~ adjusting a valve chamber cross-section of the pulsator valve in multiple stages.

14. (Previously Presented) The method according to claim 10, and further comprising:

continuously changing a valve chamber cross-section of the pulsator valve.

15. (Previously Presented) The method according to claim 12, and further comprising the step of:

maintaining a pulsator valve body of the pulsator valve in a floating position in at least one stage of the pressure changing phase.

16. (Previously Presented) The method according to claim 12, and further comprising the step of:

maintaining a pulsator valve body of the pulsator valve in a variable floating position in at least one stage of the pressure changing phase.

17. (Previously Presented) The method according to claim 1, and further comprising the steps of:

measuring pressure in the pulse chamber; and

controlling a pulsator actuator based on the pressure measurement.

18. (Currently Amended) A pulsator for a milker unit for milking an animal for alternatively connecting a vacuum source and a pressure source to a pulse chamber of at least one teat cup, the pulsator comprising:

a controller for adjusting a pressure-time curve during a pressure changing phase ~~with at least~~ having two pressure changing speed rates wherein the time of the pressure changing phase does not exceed a time of a pressure changing phase of a predetermined pressure changing phase using no controlled changes in pressure changing speed rate.

19. (Canceled)

20. (Previously Presented) The pulsator according to claim 18, and further comprising:

a timing element for adjusting the duration of a stage of a pressure changing phase.

21. (Previously Presented) The pulsator according to claim 18, wherein the controller controls the pressure curve during the ventilation phase.

22. (Previously Presented) The pulsator according to claim 18, wherein the controller controls the pressure curve during the evacuation phase.

23. (Previously Presented) The pulsator according to claim 18, and further comprising:

a pulsator valve having a variable valve chamber cross-section, the pulsator valve being in communication with the controller.

24. (Currently Amended) The pulsator according to claim 23, wherein the valve chamber cross-section is ~~discontinuously~~ variable.

25. (Previously Presented) The pulsator according to claim 23, wherein the valve chamber cross-section is variable in a plurality of stages.

26. (Previously Presented) The pulsator according to claim 18, and further comprising:

a valve and the pressure-time curve of the pressure changing phase is adjustable in dependence on a valve characteristic of the valve.

27. (Previously Presented) The pulsator according to claim 18, and further comprising:

a pilot valve in communication with the controller; and

a main valve in communication with the pilot valve.

28. (Previously Presented) The pulsator according to claim 18, and further comprising:

a direct valve in communication with the controller.

29. (Canceled)

30. (Canceled)

31. (Previously Presented) The pulsator according to claim 23, wherein the valve chamber defines a plurality of cross-sections.

32. (Previously Presented) The pulsator according to claim 18, and further comprising:

a nozzle in communication with the controller.

33. (Previously Presented) The pulsator according to claim 18, and further comprising:

a pulsator valve in communication with the controller, the pulsator valve defining

a pulsator valve chamber; and

a valve closing element disposed in the pulsator valve chamber for movement therein.

34. (Canceled)